

CLAIMS

What is claimed is:

1. A bread maker comprising a main body having an oven compartment with a front opening, a door to open and close the front opening of the oven compartment, a pair of kneading drums spaced apart from each other inside the oven compartment and winding a mixing bag filled with ingredients for bread thereon, a drum driver driving the kneading drums to rotate, a heater heating the inside of the oven compartment, and a heater driver driving the heater to operate, the bread maker comprising:

a door sensor sensing whether the door is open or closed; and

a controller controlling the drum driver and the heater driver to suspend the kneading drums and the heater, respectively, when the door sensor senses that the door is open.

2. The bread maker according to claim 1, further comprising a display part provided in a front side of the main body, wherein the controller controls the display part to display a warning message that the door is open.

3. The bread maker according to claim 1, wherein the controller controls the heater driver and the drum driver to restart the heaters and the kneading drums, respectively, when the controller determines that the door is closed within a predetermined time elapsed since the door is opened.

4. The bread maker according to claim 3, wherein the controller controls the display part to display a warning message that the predetermined time is passed when the controller determines that the predetermined time has elapsed.

5. The bread maker according to claim 1, wherein the controller controls the kneading drums to rotate in directions which release the mixing bag from the kneading drums when the controller determines that the predetermined time has elapsed since the door is opened.

6. The bread maker according to claim 2, wherein the controller controls the kneading drums to rotate in directions which release the mixing bag from the kneading drums when a predetermined time has elapsed.

7. The bread maker according to claim 3, wherein the controller controls the kneading drums to rotate in directions which release the mixing bag from the kneading drums when the predetermined time has elapsed.

8. The bread maker according to claim 4, wherein the controller controls the kneading drums to rotate in directions which release the mixing bag from the kneading drums when the predetermined time has elapsed.

9. A method of controlling a bread maker comprising a main body having an oven compartment with a front opening, a door to open and close the front opening of the oven compartment, a pair of kneading drums spaced apart from each other inside the oven compartment and winding a mixing bag filled with ingredients for bread thereon, a drum driver driving the kneading drums to rotate, a heater heating the inside of the oven compartment, and a heater driver driving the heater to operate, the method comprising:
sensing whether the door is open or closed; and
controlling the drum driver and the heater driver to suspend the kneading drums and the heater, respectively, when the door is open.

10. The method according to claim 9, further comprising displaying a warning message that the door is open when the door is open.

11. The method according to claim 9, further comprising controlling the heater driver and the drum driver to restart the heaters and the kneading drums, respectively, when the door is closed within a predetermined time elapsed since the door is opened.

12. The method according to claim 11, further comprising displaying a warning message that the predetermined time is passed when the predetermined time has elapsed.

13. The method according to claim 9, further comprising controlling the kneading drums to rotate in directions which release the mixing bag from the kneading drums when a predetermined time has elapsed since the door is opened.

14. The method according to claim 10, further comprising controlling the kneading drums to rotate in directions which release the mixing bag from the kneading drums when a predetermined time has elapsed since the door is opened.

15. The method according to claim 11, further comprising controlling the kneading drums to rotate in directions which release the mixing bag from the kneading drums when the predetermined time has elapsed.

16. The method according to claim 12, further comprising controlling the kneading drums to rotate in directions which release the mixing bag from the kneading drums when the predetermined time has elapsed.

17. A bread maker in which a bread making process is carried out including an oven compartment, a front door, upper and lower kneading drums inside the oven compartment, a drum driver driving the kneading drums, and a heater, comprising:

a door sensor sensing whether the door is open or closed; and

a controller controlling the drum driver and the heater driver to suspend the operation of the upper and lower kneading drums and the heater, when the door sensor senses that the door is open.

18. The bread maker according to claim 17, wherein the controller restarts the bread making process when the controller determines that the door is closed within a predetermined time.

19. The bread maker according to claim 18, wherein the controller controls the display part to display a warning message that the predetermined time is passed when the controller determines that the predetermined time has elapsed.

20. The bread maker according to claim 19, wherein the controller controls the kneading drums to rotate in directions which release the mixing bag from the kneading drums when the controller determines that the predetermined time has elapsed.

21. A method of controlling a bread maker, comprising:
starting a bread making process, including operations of kneading drums and a heater, based on inputted information;
suspending the operation of the kneading drums and the heater inside the bread maker, if a door is determined to be open;
determining whether to end the bread making process based on a length of time the door is determined to remain open.

22. The method according to claim 21, wherein the determining comprises determining whether a predetermined time has elapsed while the door is open.

23. The method according to claim 22, further comprising:
determining if and the extent to which the mixing bag is wound on the kneading drums;
controlling the kneading drums to rotate in releasing directions; and
further controlling the kneading drums to rotate into an initial holding position from which the mixing bag can be removed from the kneading drums.

24. The method according to claim 23, further comprising restarting the kneading drums and the heater if the door is closed before the predetermined time has not elapsed.

25. The method according to claim 24, wherein the restarting comprises operating the kneading drums and the heater during the remaining bread making process time.